

disappear from *I. reptans*. In winter *I. reptans* remains in a dormant stage without leaves. The tortoise beetle *C. circumdata* hibernates in winter on terrestrial plants especially on *Salvadora persica*. It has been reported from South India that these insects are pests on *I. carnea* and are found throughout the year with a

peak in May (Janarthan and Sivagami 1963).

I. reptans grows rapidly and can spread throughout the area within a short period. But the larvae of tortoise beetle which are exclusively dependant on *I. reptans* may play an effective role in controlling the growth.

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28. SOME NOTES ON THE DISTRIBUTION, NATURE OF HOSTS OF THE PARASITE *DENDROPHTHOE FALCATA* (L.F.) ETTINGS. IN THE POINT CALIMERE WILDLIFE SANCTUARY

Dendrophthoe falcata (L.f.) Ettings. *Loranthus longiflorus* Desr. (Fam. Loranthaceae) is a destructive semi-parasite on a large number of species of plants and is pollinated by birds (*Nectarinia* sp.). The majority of seeds are dispersed by another group of birds the flower peckers (*Dicaeum* sp.) which feed mainly on Fruits of Loranthus plants (Kannan, P. 1966, Priya Davidar 1985).

B. Singh (1962) listed 319 host species from all over India. Additions to this list have been made from different parts of the country by Chavan & Oza (1963), Srivastava (1963), Sambandam (1966), Gosh (1969). A survey at the Point Calimere Wildlife Sanctuary (An area of 5663 hectares), Tamil Nadu, revealed the presence of 29 host species in the Sanctuary. From a perusal of the literature on host plants of *Dendrophthoe falcata* it is noted that *Cissus*

vitiginea L. (Fam. Vitaceae) (Shown by an asterisk in Table 1) is not recorded as a host from South India. Hence it can be added as an additional host species to *Dendrophthoe falcata*. The nature of infection (severe, moderate or light) and distribution of host (common or rare) were also recorded (see Table 1). Monocotyledons do not have this parasitic infection and the parasite prefers trees rather than shrubs or herbs, i.e. among the 29 hosts recorded 25 are trees. The reason (Fischer 1926) being that Loranthaceae seeds are distributed mainly by birds it is to be expected that trees are more likely to receive them than shrubs. Introduced plants like *Albizia lebbek* and *Pithecolobium dulce* were more prone to the attack of this parasite. Certain symptoms like yellow coloration of leaves, formation of small burns on stems which ultimately leads

TABLE 1

LIST OF HOST PLANTS, NATURE OF INFECTION, DISTRIBUTION OF HOSTS AND ECONOMIC IMPORTANCE

S. No.	Host	Nature of Infection	Distribution of Host	Economic use
1.	** <i>Albizzia lebbek</i>	S	R	Timber
2.	<i>Cassia fistula</i>	S	C	Wood
3.	<i>Cassia marginata</i>	M	C	Timber
4.	<i>Casuarina equisetifolia</i>	S	R	Fuel wood
5.	<i>Carissa spinarum</i>	L	C	Fruit
6.	* <i>Cissus vitiginea</i>	L	C	Medicinal
7.	<i>Crataeva religiosa</i>	S	C	Religious
8.	<i>Cordia obliqua</i>	M	R	Fruits, wood
9.	<i>Dichrostachys cinerea</i>	L	C	Fuel wood
10.	<i>Ficus benghalensis</i>	L	R	Fuel wood
11.	<i>Ficus religiosa</i>	L	R	Religious
12.	<i>Gymnosporia emarginata</i>	M	R	Wood
13.	<i>Gmelina asiatica</i>	S	C	Medicinal
14.	** <i>Hemicyclia sepiaria</i>	L	R	Fuel wood
15.	<i>Ixora parviflora</i>	L	R	Fuel wood
16.	** <i>Lepisanthes tetraphylla</i>	L	R	Timber
17.	** <i>Maba buxifolia</i>	L	C	Fuel wood
18.	** <i>Manilkara hexandra</i>	S	C	Fruits
19.	<i>Memecylon umbellatum</i>	L	C	Fuel wood
20.	<i>Odina wodier</i>	L	R	Timber
21.	<i>Pongamia glabra</i>	M	C	Wood
22.	<i>Prosopis juliflora</i>	M	C	Fuel wood
23.	<i>Pithecolobium dulce</i>	S	R	Timber
24.	** <i>Plectronia parviflora</i>	M	C	Wood
25.	<i>Randia dumetorum</i>	M	C	Fuel wood
26.	<i>Salvadora persica</i>	L	C	Fruits
27.	<i>Scutia myrtina</i>	L	C	Fruits
28.	** <i>Thespesia populnea</i>	M	R	Wood
29.	<i>Zyzyphus oenoplia</i>	M	R	Fruits

Note: Nature of Infection

S — Severe

M — Moderate

L — Light

Distribution of Host

C — Common

R — Rare

to the drying of that particular branch were seen in affected species.

Double parasitism:

Several cases of double parasitism (Saxena 1971) (one species being parasitic on another

species of the same or allied genera) were also recorded. During the study it was noticed that *Viscum capitellatum* was seen parasitising *Dendrophthoe falcata* which in turn was a parasite on certain species of plants (shown in Table 1 by two asterisk marks).

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29. *ASPLENIUM CAPILLIPES* MAKINO (ASPLENIACEAE) — A
SINO-JAPANESE FERN IN THE WESTERN HIMALAYA

(With four text-figures)

During the course of a Botanical excursion, undertaken in connection with the preparation of an, 'Illustrated fern flora of W. Himalaya' by one of us (SPK), an *Asplenium* was gathered from Yamunotri hills. This fern was found to be distinct from all known W. Himalayan species of this genus, and Prof. T. Reichstein (Basel, Switzerland) confirmed the identity of the fern as *A. capillipes* Makino. This fern of China and Japan is probably rather rare in India. It is unrecorded in Himalayan fern literature and has also not been mentioned from Tibet (in Flora Xizangica 1983), except H. Ito (in Hara 1971) from Bhutan. The present record is the first authentic report for this

fern from India. A detailed description of the species is presented as it seems to be little known to Indian Pteridologists.

Asplenium capillipes Mak., Bot. Mag. Tokyo 17: 77 (1903). (Figs. 1-3).

Rhizome short; erect; apex scaly; scales dark-brown, subulate-lanceolate, apex acuminate, margin sparsely fimbriate with a few dentate projections or almost entire. Stipes (0.5-) 2.4-4.0 cm long, almost as long as the lamina; dark-green; thin, fragile; scaly at extreme base rest sparsely so, scales as on rhizome apex; rhachis usually with a vegetative bud, the position of which is variable, i.e. either at the base of the first or second pair of pinnae